NEWSLINE

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Juzaitis named to lead NAI

Raymond J. Juzaitis, a nuclear and chemical engineer with extensive experience in weapons and computational physics, has been named associate director for the Laboratory's Non- proliferation, Arms Control and International Security (NAI) Directorate and acting director for the Lab's Homeland Security Organization.

The appointment was made by Director Michael Anastasio and confirmed by the University of California and by the National Nuclear Security Administration. Juzaitis, a University of California employee since 1978, replaces Steve Cochran, who has been serving in the position in an acting capacity for the past year. Juzaitis' appointment is effective immediately.

JACQUELINE MCBRIDE/NEWSLINE

Ray Juzaitis speaks with reporters at a press conference following the announcement of his appointment Wednesday.

In making his announcement, Anastasio noted that Juzaitis brings broad expertise to his new role. "Ray's impressive background and leadership in nuclear weapon design and technology, along with extensive experience with the DOE and DOD make him an excellent choice for this position. His tenure at Livermore has complemented his past experience and expertise in national security," he said. "I am pleased Ray is joining my senior management team and I am confident that he will be committed to maintaining the vital, world-class science and technology in NAI and HSO."

In his new role, Juzaitis will be responsible for leading, developing and managing organizations that provide technology, analysis and expertise in preventing the spread or use of weapons of mass destruction. LLNL's NAI and Homeland Security

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Lab engineer Mike Newman receives U.S. Army award for Iraq surveillance system

By Stephen Wampler

NEWSLINE STAFF WRITER

Lab employee Mike Newman has been presented with the Commander's Award for Civilian Service by the U.S. Army for his work during two stints in Iraq in 2004.

A technical associate in Electronics Engineering, Newman received his award on June 10 during a ceremony held at Fort Monmouth, N.J., near Newark.

The award citation commends Newman "for exceptional service as the lead systems engineer and architect for the Persistent Threat Detection System from February to November 2004."

During his first visit to Iraq, Newman spent nine days there in May 2004, and later was there for seven-and-a-half weeks in September and October. He oversaw the development and fielding of round-the-clock, advanced surveillance technologies for tracking terrorists and protecting the U.S. military in an area of hostile fire.

He served as the chief systems integrator and was the technical lead for 19 people from six different companies. During his time in Iraq, he lived in Camp Victory and Camp Slayer at Baghdad International Airport in the western part of the Iraqi capital.

According to U.S. Army officials, "(The) Persistent Threat Detection System has come to be a jewel of the collective assets employed by the

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Former Lawrence fellow Ullom receives 2004 presidential award for research on superconductors

Physicist Joel Ullom, a former Ernest O. Lawrence fellow at the Laboratory, has received a 2004 Presidential Early Career Award for Scientists and Engineers (PECASE), the nation's highest honor for professionals at the outset of their independent research careers.

Ullom is the second former Lawrence fellow to earn the honor this year. Wei Cai, an assistant professor of mechanical engineering at Stanford University, was honored for work he did while serving as a Lawrence fellow at the Laboratory from 2001 to 2004 (see *Newsline*, June 17, 2005).

The awards were presented in a White House ceremony last week by Presidential Science Adviser John Marburger.

Ullom received the award for his work at the National Institute of Standards and Technology (NIST) laboratories in Boulder, Colo. A Lawrence fellow from 1999 to 2002, Ullom was honored for "new insights into quasiparticle dynamics in superconductors and the physics governing noise in superconducting phase transitions, and for his development of

See **PECASE,** *page 3*

'Got Science?' gets a crowd

JULIE KORHUMMEL/NEWSLINE

Scientist Pete Nunez educates a future forensic scientist on what it takes to conduct an investigation, as part of the Laboratory's "Got Science? Discover Science Saturday" fair. The annual fair is a presentation of interactive displays and hands-on demonstrations of scientific principles. This year's fair had a physics theme in honor of the "World Year of Physics," which marks the 100-year anniversary of Albert Einstein's groundbreaking theories.

LAB COMMUNITY NEWS

Weekly Calendar

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Monday 4

The Lab will be closed today in observance of the **Fourth of July.**

• • •

Volunteers are needed for today's **"Old Fashion Fourth of July" celebration** sponsored by the Livermore Area Recreation & Park District (LARPD) at Robertson Park. Volunteers are needed to work from 7-9:30 p.m. in the beverage booth and at the pedestrian entrance gates. All volunteers will receive free entrance into the event and a meal. Call Geneal Williams at the LARPD at 373-5748 for more information or to sign up.

Wednesday 6

Check out the **weekly barbecue** offered today and every Wednesday from 11:30 a.m. to 1:30 p.m. at the South Café by Java Wave to provide more menu options for students and summer guests housed in the South Mall area. The menu includes a choice of hamburger or hot dog, accompanied with chips, cookie and soft drink for $5.50.

• • •

The **Lab library** is assessing its services and products and asking employees to provide input via a questionnaire. The goal of the assessment is to help determine the future state or "future strategic direction" of the library. What will the library look like in 2010? What resources and services will we need to provide? What does it take to make the LLNL library a "world class" library?

You can assist in this effort by filling out the questionnaire located on the Web: http://www-r.llnl.gov/tid/library/contact_us/library_survey.pdf

Completed questionnaires may be returned in the Lab mail to Isom Harrison at L-610.

Classified ads available online

Due to space restrictions in this week's *Newsline*, the classified ads are available only on the Web, located at https://www-ais.llnl.gov/newsline/ads/ or http:// www.llnl.gov/pao/employee/. Ads must be submitted by close of business Tuesdays in order to appear that week in *Newsline* or on the Web. Because of the July 4 holiday, classified ads will not appear in print until the Friday, July 15 edition of *Newsline*.

Blowing the whistle on wrongdoing

The University of California has asked all of its locations, including LLNL, to provide their UC employees with annual notice on "How to Blow the Whistle on Suspected Improper Activities." This notice contains a message from the State of California auditor describing the services and protections offered to persons who report the improper acts of state agencies or employees.

UC is considered a state agency for the purposes of this notice. The notice also lists the LLNL departments to which reports of improper activities may be made and from which additional information can be obtained, and provides UC's whistleblower hotline number.

Contact information

UC's Universitywide Whistleblower Hotline, which is independently operated to help ensure confidentiality, is 1-800-403-4744.

The DOE Hotline and other DOE contact information is:

1-800-541-1625 or
(202) 586-4073
(202) 586-9936 (TDD)
http://www.ig.doe.gov/hotline.htm
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585

Laboratory employees should feel free to utilize the State Auditor's Hotline and process, as described in the notice, and UC's Universitywide Whistleblower Hotline. The DOE Hotline is also available if employees suspect fraud, waste or abuse by a DOE employee, contractor (such as UC/LLNL) or grant recipient.

A copy of the "How to Blow the Whistle on Suspected Improper Activities" notice may be accessed at: http://www-r/pao/handouts/LLNL_2003_ WB_Poster.pdf

For additional information on LLNL Whistleblower and Whistleblower Protection policies and procedures, contact the Staff Relations Office at 2-9501.

IN MEMORIAM

Samuel Cochrane

Samuel Paul Cochrane died on June 27 after a lengthy illness. He was 64.

Cochrane worked at the Lab as a taxi driver after his retirement from the banking industry. According to his wife, Loretta Cochrane, an employee of the Hazards Control Department, being a driver for the Lab's director and associate directors was a position that he thoroughly enjoyed and one of the highlights of his working life.

Born in Queens, N.Y., March 25, 1941, to Vincent and Marie (Disabato) Cochrane, he was a life member of the Society of the First Infantry Division, and proudly served in the US Army in Alaska, in the Berlin Brigade where he patrolled the Berlin Wall, and in Vietnam. He received his bachelor's degree from St. Mary's College in Moraga.

Cochrane's interests included history, cooking, family vacations at the Jersey Shore, and fishing and golfing with his best friend Denis. He will be especially remembered by his sons' friends for the "world famous" chili he made every Christmas.

Cochrane leaves his wife of 38 years, Loretta; sons Brian and daughter-in-law Paula of New York City; Andrew and girlfriend Michelle Hume of Rohnert Park; and Kevin of San Francisco.

Viewing and visitation will be held Tuesday, July 5, 5-8 p.m. (rosary at 7 p.m.) at Callaghan's Mortuary in Livermore. Funeral Mass will be held Wednesday, July 6, at St. Michael's Church, Livermore at 11 a.m. Burial with military honors will be at St. Michael's cemetery, 3885 East Ave., Livermore, immediately following the mass. Donations in his memory may be made to the Weisner Memorial Fund, Livermore.

Lucille Thibault McPherson

Lucille Thibault McPherson, known as "Lucy" to family and friends, died in Anacortes, Wash., on June 1 after a long illness. She was 58.

When the Laboratory opened in 1951, McPherson's family moved to Livermore, where her father worked until his retirement. McPherson graduated from Livermore High School, attended Chabot Junior College in Hayward and College of Holy Names in Oakland.

McPherson worked at the Lab as an analyst/information system assistant and computer analyst, retiring in 1993. She and her husband moved to Anacortes in 1995 to spend time with their daughter and grandchildren. One of her favorite hobbies was genealogy. She enjoyed people and contributing to the community.

McPherson was preceded in death by her parents, Leonard Ralph and Denise Marie Thibault of Pleasanton. She leaves her husband of 41 years, Lynn Douglas McPherson; two daughters, Caryn Ann Medina and her husband Rick of Daly City; and Sharon Lee Epperly McPherson of Anacortes; three grandchildren; a sister, DianneThibault Masluk of Livermore; and aunts Marie Thibault Truitt of Livermore and Audrey Thibault Finnegan of North Bend, Wash.

A mass was celebrated in Anacortes, followed by a memorial service and burial in Livermore on June 25.

Newsline

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AROUND THE LAB

PECASE

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improved superconducting sensors and the first practical quantum solid-state refrigerator."

While at Livermore, Ullom, who completed his Ph.D. at Harvard, focused on the development of cryogenic detectors, which are small electrical circuits that produce a current or voltage pulse when hit by a photon or particle. The detector must be cooled to temperatures between 0.1 and 1 degree kelvin, so that the energy of a single photon will produce measurable heating. Ullom used cryogenic detectors to weigh the protein fragments dislodged from bacterial spores by a pulse of laser light. He also developed refrigeration technology to produce the ultralow temperatures needed for cryogenic detectors.

Joel Ullom

Ullom became a Laboratory career employee before leaving for a position at NIST.

Summer Student Calendar

Seminars, panels and other activities are now in full swing for summer student employees. Go to the Student Bulletin Board at http://education.llnl.gov/sbb/for details and to register for events.

Wednesday 6

DHS Seminar: "Homeland Security Organization (HSO) Overview," by Don Prosnitz, PAT Directorate, AD Office. Noon-2 p.m., Bldg. 132S, room 1755 auditorium. Contact: Barry Goldman, 2-5177.

Workshop: "How to Design Effective Posters," by Marsha McInnis, Mitch Alvarez and Kerwin Falls, University Relations Program. 10 a.m., Bldg. 219, room 163. Contact: Barry Goldman, 2-5177.

Thursday 7

UC Davis Tram Tour. 8:45 a.m.-2 p.m. Contact: Laura O'Brien, 2-7295.

MARA Seminar: "Detecting a Nuclear Weapon in Cargo," by Dennis Slaughter, PAT Directorate, N Division. Noon, Bldg. 219, room 238. Contact: Barry Goldman, 2-5177.

HEDP Seminar: "How Bombs Work," by Jim Rathkopf, AX Division. 1:30 p.m., Bldg. 219, room 163. Contact: Vickie Stone McFadden.

Seminar: "How to Get Into Grad School," by Colette Patt, UC Berkeley. 9:30 a.m. to 12:30 p.m. Sandia, Bldg. 904 auditorium. Contact: Jan Bachman, Sandia, 294-4660.

Wednesday 13

Seminar: "Energy Issues From a Global Perspective," by Gunnar Tamm, U.S. Military Academy at West Point. 2 p.m., Bldg. 482 auditorium, room 1103. Contact: Maureen Lewis, 2-2626.

DHS Seminar: "Rad/Nuc Countermeasures at LLNL," by Christine Hartmann-Siantar, Chemistry and Materials Science Directorate. Noon-2 p.m., Bldg. 132S, room 1755. Contact: Barry Goldman, 2-5177.

ICST Seminar: "Babel/CCA," by Tom Epperly. 2:30 p.m., Bldg. 219, room 163. Contact: Tiffany Ashworth, 4-3491.

Workshop: "How to Design Effective Posters," by Marsha McInnis, Mitch Alvarez and Kerwin Falls, University Relations Program. 10 a.m., Bldg. 219, room 163. Contact: Kerwin Falls, 2-6098.

Thursday 14

Panel: "Women in Science — Career Challenges." 10:30 a.m.-noon, Bldg. 482 auditorium. Lunch to follow. Contact: Karen Lema-Crowe, 2-6233.

MARA Tour: National Atmospheric Release Advisory Center (NARAC). 10 a.m., Bldg. 170, room 1018. Contact: Barry Goldman, 2-5177.

HEDP Seminar: "Experimental Science at the Extremes: A Survey of HED Laboratory Astrophysics," by Bruce Remington. 1:30 p.m., Bldg. 219, room 163. Contact: Vickie Stone McFadden, 2-5308.

Please send your summer student calendar items to lucchetti1@llnl.gov

Technical Meeting Calendar

Thursday 7

ENGINEERING
Seminar Series: "Global Energy Security, Renewable Energy, and Roadmap to Hydrogen Economy — Hydropower and the Oceans," by Gunnar Tamm, U.S. Military Academy. 1:30 p.m., Bldg. 543, room 1258. Common use facility. Foreign nationals may attend. Contact: Helen Magann, 2-5229.

CENTER FOR ACCELERATOR MASS SPECTROMETRY
"Mid-Holocene Paleoclimate of Western North America and the California Current," by Noah S. Diffenbaugh, Purdue University. 2-3 p.m., Trailer 2925, room 122. Property protection area. Foreign national temporary building access procedures apply. Contact: Tom Guilderson, 2-1753.

Friday 8

LIVERMORE PROJECTS COMMITTEE
"Requirements and Design for the Reliable Replacement Warhead," by Scott Faas, Sandia National Labortories, Livermore, and "Reliable Replacement Warhead Candidate," by Juliana Hsu, LLNL. 8:45 a.m., Bldg. 132 auditorium. All attendees must have a SP access card or obtain special approval to attend any meeting. For LLNL, contact Barbara Sherohman, 3-6379, with any SP access questions. For SNL, contact Ann Stayton at 925-294-2582 with any SP access questions. Property protection area. No temporary building access for foreign nationals. Contact: Scott Couture, 3-4100, or Frances Mendieta, 3-7825.

Thursday 14

ATMOSPHERIC SCIENCE DIVISION
"Data Mining in this Nonlinear and Nonstationary World: What We Should Look For, and How?" by Norden Huang, NASA Goddard Space Flight Center. 11 a.m., Bldg. 170, room 1091. Contact: Sharon Mickels, 3-9279.

ENGINEERING
Seminar Series: "Global Energy Security, Renewable Energy, and Roadmap to Hydrogen Economy - Geothermal Energy," by Gunnar Tamm, U.S. Military Academy. 1:30 p.m., Bldg. 543, room 1258. Common use facility. Foreign nationals may attend. Contact: Helen Magann, 2-5229.

HAZARDS CONTROL
"Coherent Demonstration/Seminar," by Coherent Lasers. 9 a.m.-3 p.m., Trailer 2627, room 1020. Common use facility. Foreign nationals may attend. Contact: Mark Ludwig, 2-6964.

The deadline for the next Technical Meeting Calendar is noon Wednesday.
Please submit your meetings via the new Technical Meeting Calendar form on the Web, located at http://wwwr.llnl.gov/tmc/index.html

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NEWMAN

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1st Cavalry Division."

In his award citation, Newman was honored with this statement:

"You demonstrated superior leadership as evidenced by your numerous contributions to develop, acquire and field a critically required intelligence, surveillance and reconnaissance capability into the theater of operations. This system has proven to be a great asset to the warfighter by detecting enemy fire and saving soldiers' lives. Your service and dedication are in keeping with the highest traditions of civilian service and reflect great credit upon you, Lawrence Livermore National Laboratory and the United States Army."

On a number of occasions in the past year, the Persistent Threat Detection System has assisted the military in stemming terrorist attacks and capturing terrorists. They include:

• March 8, 2005: After a detection system alert warning, seven individuals armed with AK-47 rifles were seen setting up a mortar. A Quick Reaction Force was dispatched and the mortar placement was confiscated before it could be operated.

• Dec. 21, 2004: During routine surveillance, three individuals left a house and stopped at a weapons cache. A mortar and several shells were placed in the trunk of a vehicle.

• Dec. 2, 2004: During routine surveillance, individuals were seen placing an improvised explosive device along a roadside.

• Dec.1, 2004: After a detection system alert warning, a Quick Reaction Force was dispatched and small arms weapons were confiscated.

Newman's award was signed by Col. Michael Bowman, the project manager for Night Vision/ Reconnaissance, Surveillance and Target Acquisition.

Anna-Marie Van Brunt, deputy program manager for Remote Unmanned Sensors in the U.S. Army, presents Lab employee Mike Newman with the Commander's Award for Civilian Service.

JUZAITIS

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organizations also provide comprehensive solutions integrating threat, vulnerability, advanced technologies and operations to assist federal, state, local and private entities in defending against terrorism. He will be responsible for more than 230 employees and a combined budget of $350 million.

"I am honored to be a part of the NAI and Homeland Security teams," said Juzaitis. "This Lab has been a leader in helping the nation win the war on terrorism and in supporting our nation's efforts in reducing the international threat of nuclear proliferation. I have no doubt that we will continue to make a significant difference in the future. I look forward to working with all the employees in NAI and Homeland Security to ensure our success."

For the past year, Juzaitis has served as NAI's chief scientist. Prior to that, he was the associate director for Weapons Physics and the deputy associate director for Nuclear Weapons at Los Alamos National Laboratory. He has also served as the director of Applied Theoretical and Computational Physics Division (X-Division) and in a number of other nuclear weapons-related positions at LANL since 1978.

Juzaitis also served as senior technical adviser for defense programs at the Department of Energy from 1998-99; and from 1988-90, he was the special scientific adviser to the office of the assistant to the secretary of Defense for Atomic Energy.

He has a bachelor's degree in Chemical Engineering from Princeton University, and a master's and Ph.D. in Nuclear Engineering from the University of Virginia.

Juzaitis is the recipient of three DOE Weapons of Excellence Awards and is a member of the American Nuclear Society. He lives in Livermore with his wife, Helen, and they have two grown children. In his spare time, he enjoys musical composition and playing the piano.

Warm reception

FRANK NUNEZ/TID

Wayne Shotts, the Lab's deputy director for Operations, talks with Christophe Picard, a graduate student at the University of Bordeaux, France, and the University of Houston, Texas, and Pak-Wing Fok (right), a graduate student at MIT, at the summer student reception hosted by the Director's Office this week.

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